What is Claimed:

1. An electrical connector comprising:

a substantially planar dielectric;

a substantially planar ground plane disposed on one planar surface of the dielectric; and

a signal conductor disposed on the opposing planar surface of the dielectric.

2. The electrical connector as recited in claim 1 wherein the dielectric comprises polyimide.

3. The electrical connector as recited in claim 1 wherein the dielectric comprises a recess for receiving a solder ball for a ball grid array connection to a circuit card.

4. The electrical connector as recited in claim 1 wherein the dielectric comprises a finger extending substantially in the plane of the dielectric, the signal conductor extending along the finger.

5. The electrical connector as recited in claim 1 wherein the ground plane comprises a plurality of ground contact pins extending from an end thereof.

6. The electrical connector as recited in claim 1 wherein the ground plane is substantially continuous and the signal conductor comprises a plurality of coplanar differential pairs of signal conductors.

7. The electrical connector as recited in claim 6 wherein each signal conductor is located adjacent to the continuous ground plane.

8. The electrical connector as recited in claim 1 wherein the ground plane comprises phosphor bronze.

9. The electrical connector as recited in claim 1 wherein a portion of the ground plane is plated and etched onto the dielectric.

10. The electrical connector as recited in claim 1 wherein the signal conductor comprises a signal contact pin.

11. The electrical connector as recited in claim 1 wherein a portion of the signal conductor is plated and etched onto the dielectric.

12. The electrical connector as recited in claim 1 wherein the signal conductor comprises a first section and a second section disposed approximately ninety degrees to the first section.

13. The electrical connector as recited in claim 1 wherein the signal conductor comprises a differential pair of signal conductors.

14. The electrical connector as recited in claim 13 wherein each signal conductor is located in a first plane substantially parallel to the ground plane and each signal conductor comprises a signal contact pin located in a second plane substantially orthogonal to the ground plane.

15. The electrical connector as recited in claim 1 wherein the signal conductor comprises a plurality of differential pairs of signal conductors and conductors within a differential pair of signal conductors are located closer than conductors of two adjacent differential pairs.

16. An electrical connector comprising:

a plurality of connection modules located substantially parallel to each other, each module comprising:

a substantially planar dielectric;

a substantially planar ground plane disposed on one planar surface of the dielectric; and

a signal conductor disposed on the other planar surface of the dielectric.

17. The electrical connector as recited in claim 16 wherein, for each connection module, the signal conductor comprises a plurality of differential pairs of signal conductors.

18. The electrical connector as recited in claim 17 wherein, for each connection module, each signal conductor is located in a first plane substantially parallel to the ground plane and each differential pair of signal conductors comprises a pair of signal contact pins, each pair of signal contact pins located in a plane substantially orthogonal to the ground plane.

19. The electrical connector as recited in claim 18 wherein, for each connection module, the ground plane comprises a ground contact pin for each differential pair of signal conductors and each ground contact pin is located substantially coplanar with a corresponding pair of signal contact pins.

20. An electrical interconnection system comprising:

a header connector comprising:

a plurality of connection modules located substantially parallel to each other, each module comprising:

a substantially planar dielectric;

a substantially planar ground plane disposed on one planar surface of the dielectric; and

a plurality of differential pair signal conductors disposed on the other planar surface of the dielectric, for each connection module, each signal conductor is located in a first plane substantially parallel to the ground plane and each differential pair of signal conductors comprises a pair of signal contact pins, each pair of signal contact pins located in a plane substantially orthogonal to the ground plane, and the ground plane comprises a ground contact

pin for each differential pair of signal conductors and each ground contact pin is located substantially coplanar with a corresponding pair of signal contact pins; and

a receptacle connector comprising:

a plurality of receptacles contacts for receiving the signal contact pins and the ground contact pins.

21. The electrical interconnection system as recited in claim 20 wherein the plurality of receptacle contacts are substantially cylindrical shaped.

22. The electrical interconnection system as recited in claim 20 wherein the plurality of receptacle contacts are arranged into an array of rows and columns.

23. The electrical interconnection system as recited in claim 22 wherein the columns are arranged in repeating patterns of first, second, and third columns and the first and second columns are spaced farther apart than the second and third columns.

24. The electrical interconnection system as recited in claim 22 wherein the columns are arranged in repeating patterns of first, second, and third columns and the first and second columns are for connection to differential pair signal contact pins and the third column is for connection to ground contact pins.

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25. A method of making an electrical connector, the method comprising:

providing a substantially planar dielectric; and

etching a plurality of conductors onto one surface of the dielectric.

26. The method as recited in claim 25, further comprising:

etching a substantially continuous ground plane onto the other surface of the dielectric.

27. The method as recited in claim 25, further comprising:

connecting a substantially continuous ground plane onto the other surface of the dielectric.

28. The method as recited in claim 25, further comprising:

connecting a connector to each end of each of the plurality of conductors.

29. The method as recited in claim 28, wherein connecting a connector comprises, for each conductor, connecting a contact pin to one end of the conductor and connecting a solder ball to the other end of the conductor.